Application No.: 10/593,898

Art Unit: 1634

Amendment

Attorney Docket No.: 063057

**REMARKS** 

Claims 1 and 3-14 were pending in the present application and were rejected. Claims 1,

3-5, 7, 11, 13 and 14 are herein amended. Claims 6, 8-10 and 12 are herein cancelled without

prejudice.

Applicants' Response to Claim Rejections under 35 U.S.C. §112

Claims 7-9 were rejected under 35 U.S.C. §112, second paragraph, as being

indefinite for failing to particularly point out the and distinctly claim the subject matter

which applicant regards as the invention.

The Office Action states that the phrase "for a long term" is a relative term, and the metes

and bounds of what is intended cannot be determined. In response, Applicants herein amend

claim 7 to delete this language, and to recite preserving the nucleic acids for at least 120 hours.

Please see amended claim 7. Accordingly, Applicants herein cancel claims 8 and 9. Favorable

reconsideration is respectfully requested.

Applicants' Response to Claim Rejections under 35 U.S.C. §102

Claims 1, 3-6 and 10-14 were rejected under 35 U.S.C. §102(b) as being anticipated

by Ohno et al. (J. of the Electrochemical Society 148(4): E168-E170 (2001)).

It is the position of the Office Action that Ohno discloses the invention as claimed.

Applicants first discuss claim 1. Ohno discloses the mixing of ethylimidazolium

tetrafluoroborate (EtImBF<sub>4</sub>) with DNA to obtain a flexible film. As illustrated at the top of the

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first column on page E169, EtIMBF<sub>4</sub> contains an imidazolium cation and a BF<sub>4</sub> anion.

Applicants herein amend claim 1 to remove BF<sub>4</sub> from the Markush group of anions. As such,

Applicants respectfully submit that Ohno does not disclose the embodiments as claimed. Claim

10 is herein cancelled, since its subject matter has been incorporated into claim 1.

Next, Applicants discuss the claim term "halide ion." It is the position of the Office

Action that that BF<sub>4</sub> is "a halide ion," even though this interpretation contradicts the citation

provided, which states that "The halide anions are fluoride (F), chloride (Cl), bromide (Br),

iodide (I') and astatide (At')." In other words, there are only five possible halide anions, and BF4

is not one of them. Although BF4 has a negative charge and includes a halogen, it is not is a

"halide ion."

However, in order to expedite examination, Applicants herein amend the claims to

remove the recitation of "a halide ion" and add the recitation of "Cl, Br and I." Applicants do

not recite fluoride (F) and astatide (At) at this time. Please see the amended claims. Ohno does

not disclose or suggest one of the recited anions, it cannot anticipate the claimed embodiments.

With respect to claim 4, the Office Action cites page E168, second paragraph to show that

EtIMBF4 is a neutralized ionic liquid. With respect to claim 5, it appears that the Office Action

regards this claim as reciting an intended use, which does not carry patentable weight. Applicant

respectfully submits that claims 4 and 5 are patentable at least due to their dependency on claim

1.

With respect to claim 6, Applicants herein cancel this claim. Thus, the rejection of claim

6 is moot.

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With respect to claims 11-14, the Office Action alleges that these claims are rejected for

the same reasons as discussed with respect to claims 1, 3-6 and 10. In response, Applicants

respectfully submit that claims 11, 13 and 14 are patentable for similar reasons as claims 1 and 3,

above. Similar to claim 10, claim 12 is herein cancelled, since its subject matter has been

incorporated into claim 11. Favorable reconsideration is respectfully requested.

<u>Claim Rejections – 35 U.S.C. §§102/103</u>

Claims 7 and 8 are rejected under 35 U.S.C. §102(b) as anticipated by or, in the

alternative, under 35 U.S.C. §103(a) as obvious over Ohno.

It is the position of the Office Action that Ohno discloses the method as claimed, with the

exception of explicitly teaching that "the nucleic acid dissolved in their ionic liquid is

preserved." The Office Action argues that this is inherent to the ionic liquids of Ohno.

In response, Applicants herein incorporate the allowable subject matter of claim 9 into

claim 7. Applicants herein cancels claim 8. Thus, this rejection is moot.

Allowable Subject Matter

The Office Action indicates that claim 9 would appear to be allowable if rewritten to

overcome the rejections under 35 U.S.C. §112. Applicants herein re-write claim 9 to be in

independent form.

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For at least the foregoing reasons, the claimed invention distinguishes over the cited art

and defines patentable subject matter. Favorable reconsideration is earnestly solicited.

Should the Examiner deem that any further action by applicants would be desirable to

place the application in condition for allowance, the Examiner is encouraged to telephone

applicants' undersigned attorney.

If this paper is not timely filed, Applicants respectfully petition for an appropriate

extension of time. The fees for such an extension or any other fees that may be due with respect

to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

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